



# ENVS828

## Research Methods for Sustainable Development

S2 Evening 2019

*Dept of Environmental Sciences*

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## General Information

Unit convenor and teaching staff

Unit Convenor

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Lecturer

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Credit points

4

Prerequisites

Admission to MEnvEd or MSc or MEnvMgt or MEnvStud or MSusDev or MEnvPlan or MEnv or MSocEntre or GradDipEnv or GradCertEnv or GradCertSusDev or GradDipSusDev or GradCertSIA or GradDipSIA or MPH or MScInnovation

Corequisites

Co-badged status

Unit description

This unit provides an overview of the role of research in sustainable development and in research paradigms and methods. Students will have practical experience of processing and communicating quantitative and qualitative data to guide action. The unit will emphasise action research providing students with an opportunity to explore, at a practical level, how action research can be used as a tool to achieve the goals of sustainable development. Students will develop skills in research planning, literature review and writing a research funding proposal. Students will be introduced to the ethical considerations and processes of undertaking research. The unit provides students with a broad understanding of the comparative usefulness of different research methods for sustainable development.

## Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <https://www.mq.edu.au/study/calendar-of-dates>

## Learning Outcomes

On successful completion of this unit, you will be able to:

- Show a basic understanding of research paradigms, associated methodology and the purposes of research for sustainable development
- Apply action research methods in the design and planning of a project for sustainable development
- Demonstrate an ability to critically review international literature on action research to write a literature review for your project
- Present and defend a research project
- Understand the importance of ethics in research
- Prepare a funding proposal for research using a grantee's format
- Demonstrate skills to process data from research and present findings in a report for a client

## General Assessment Information

The assessments in this unit are oriented to work practice.

1. Writing and presenting a mini consultant report. The style of writing is appropriate to informing a client of the results of surveys undertaken in an organisation, and recommending the next steps based on the research.
2. Preparing a survey: You might use a survey in an organisation you are working in to guide strategy planning, or sustainability actions
3. Applying for a grant: Many organisations apply for grants to assist them in their work. Grants are available from both government and philanthropic organisations.
4. A literature review which provides the context for the project, develops skills of making a case for a project supported with your ideas supported by academic literature (evidence based reporting).
5. Presenting and defending a proposal

## Assessment Tasks

Name	Weighting	Hurdle	Due
<a href="#">1. Research methodology</a>	15%	No	August 26
<a href="#">2. Research Proposal</a>	25%	No	September 20
<a href="#">3. Funding Proposal</a>	50%	No	31 October

Name	Weighting	Hurdle	Due
<a href="#">4. Data Analysis &amp; Report</a>	10%	No	13th November

## 1. Research methodology

Due: **August 26**

Weighting: **15%**

Your task is to analyse the elements of two research papers (to be advised) to demonstrate an understanding of the purposes of research, the research philosophy, research design, ethical principles, analysis of data and conclusions in relation to sustainable development.

On successful completion you will be able to:

- Show a basic understanding of research paradigms, associated methodology and the purposes of research for sustainable development
- Understand the importance of ethics in research

## 2. Research Proposal

Due: **September 20**

Weighting: **25%**

This assignment requires students to prepare a research project proposal (draft) for a sustainable development issue with an **action research** method. This task includes: a) a summary of a research project for sustainable development; b.) a poster; c.) a short literature review; d.) presentation of the research plan.

On successful completion you will be able to:

- Show a basic understanding of research paradigms, associated methodology and the purposes of research for sustainable development
- Apply action research methods in the design and planning of a project for sustainable development
- Demonstrate an ability to critically review international literature on action research to write a literature review for your project
- Understand the importance of ethics in research

## 3. Funding Proposal

Due: **31 October**

Weighting: **50%**

In this assignment you are expected to submit a completed funding proposal for an action

research project for sustainable development. You are required to provide the proposal in the format of a grant organisation. The second component is to provide a separate literature review to justify your research proposal topic and approach.

On successful completion you will be able to:

- Show a basic understanding of research paradigms, associated methodology and the purposes of research for sustainable development
- Apply action research methods in the design and planning of a project for sustainable development
- Demonstrate an ability to critically review international literature on action research to write a literature review for your project
- Present and defend a research project
- Understand the importance of ethics in research
- Prepare a funding proposal for research using a grantee's format

## 4. Data Analysis & Report

Due: **13th November**

Weighting: **10%**

This assignment provides practice in analysing data from a survey - both quantitative and qualitative. The other skills to be demonstrated are being able to present the results in a mini consultant report in a manner that is helpful to a client, and forming recommendations based on the findings. Details of the data will be provided on ilearn and explained in the class session.

On successful completion you will be able to:

- Demonstrate skills to process data from research and present findings in a report for a client

## Delivery and Resources

The unit is taught by weekly evening sessions of three hours.

The three hour sessions will consist of short presentations to introduce a theme or idea; discussion groups on short class assignments based on readings, or activities to develop skills, or understanding of the research design process. The unit is being taught in an active learning space encouraging participation through out.

**The last 2 sessions require you to bring your computer to work on excel to process data.**

The main emphasis of the unit is oriented to assisting you to prepare and submit a **research** funding proposal, providing practice in designing research and in applying for funds. Students practice the following skills through the assignments, in class discussions and

delivery:

- evaluating research
- designing a research project.
- communicating their research project by making a poster and by presenting a 'pitch' for their research topic,
- forming questions to seek professional input to the proposal,
- developing a funding proposal within the requirements of a donor's format. The funding agency chosen could be an international aid agency such as AusAid, NORAD, DFID, DANIDA, SIDA or USAID, a Foundation like the MacArthur Foundation (US) or a state agency (such as NSW Office of the Environment – Environment Trust). The funding agency "chosen" for your application needs to be have a stated interest in your project theme.
- Students are also guided on data processing and presentation using excel and develop skills of writing a report as a consultant for a client.

The unit requires the student to read widely to understand the research process, the role of research for sustainable development, the role of the researcher in the research process, the ethics of research, the ways research is designed, and how it will be evaluated.

Further instructions on assignments and reading are provided through ilearn.

**Some key resources include:**

Action Research Journal (Sage)

ALAR: Action Learning and Action Research Journal

Educational Action Research (Journal)

**Bradbury P & Reason H. 2007 *The Sage Handbook of Action Research: Participative Inquiry and Practice***

Bryman A. 2012 *Social research methods* Oxford University Press - provides a good overview of social research, methodology and good details on methods.

Ferrance, A 2000 *Action Research* Northeast and Islands Regional Educational Laboratory At Brown University (this is a brief introduction to Action Research in Education)

[https://www.brown.edu/academics/education-alliance/sites/brown.edu/academics/education-alliance/files/publications/act\\_research.pdf](https://www.brown.edu/academics/education-alliance/sites/brown.edu/academics/education-alliance/files/publications/act_research.pdf)

Greenwood D. & Levin M 1998 *Introduction to action research: Social research for social change* Sage - These authors take a pragmatic view of action research oriented to organisational change and consultancy in management

Kemmis S. McTaggart R Nixon R. 2014 *The Action Research Planner Doing Critical Participatory Action Research* Springer - This reference by Australian and Canadian researchers is oriented to action research in education with a particular focus on critical participatory action research.

Practical structures are provided and questions to guide the researcher are included. There are several case studies from the education sector.

Stringer E.T 1996 *Action research: A handbook for practitioners* Thousand Oaks Sage - This Australian author draws on experience in community action research and education

Wadsworth Y 2011 *Do it yourself social research* (3rd ed) Allen and Unwin - This reference provides a practical guide to planning and managing a community based action research project, written in an accessible form.

Wadsworth Y. 2010 *Building in Research and Evaluation Human Inquiry for living systems* Allen and Unwin - This reference builds on the above and provides a deeper theory of how we can inquire. A valuable series of research questions and case studies from the human health services field are included

Zuber-Skerritt, O (ed) 1990 . *Action research for change and development* Nathan, Qld. : Centre for the Advancement of Learning and Teaching, Griffith University

## Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central \(https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central\)](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- [Academic Appeals Policy](#)
- [Academic Integrity Policy](#)
- [Academic Progression Policy](#)
- [Assessment Policy](#)
- [Fitness to Practice Procedure](#)
- [Grade Appeal Policy](#)
- [Complaint Management Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#) (**Note:** *The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.*)

Undergraduate students seeking more policy resources can visit the [Student Policy Gateway \(https://students.mq.edu.au/support/study/student-policy-gateway\)](https://students.mq.edu.au/support/study/student-policy-gateway). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

If you would like to see all the policies relevant to Learning and Teaching visit [Policy Central \(https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central\)](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central).

## Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of

Conduct: <https://students.mq.edu.au/study/getting-started/student-conduct>

## Results

Results published on platform other than [eStudent](#), (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in [eStudent](#). For more information visit [ask.mq.edu.au](http://ask.mq.edu.au) or if you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## Student Support

Macquarie University provides a range of support services for students. For details, visit <http://students.mq.edu.au/support/>

## Learning Skills

Learning Skills ([mq.edu.au/learningskills](http://mq.edu.au/learningskills)) provides academic writing resources and study strategies to improve your marks and take control of your study.

- [Workshops](#)
- [StudyWise](#)
- [Academic Integrity Module for Students](#)
- [Ask a Learning Adviser](#)

## Student Services and Support

Students with a disability are encouraged to contact the [Disability Service](#) who can provide appropriate help with any issues that arise during their studies.

## Student Enquiries

For all student enquiries, visit Student Connect at [ask.mq.edu.au](http://ask.mq.edu.au)

If you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## IT Help

For help with University computer systems and technology, visit [http://www.mq.edu.au/about\\_us/offices\\_and\\_units/information\\_technology/help/](http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/).

When using the University's IT, you must adhere to the [Acceptable Use of IT Resources Policy](#). The policy applies to all who connect to the MQ network including students.

## Graduate Capabilities

### PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.



This graduate capability is supported by:

## **Learning outcomes**

- Apply action research methods in the design and planning of a project for sustainable development
- Understand the importance of ethics in research
- Prepare a funding proposal for research using a grantee's format
- Demonstrate skills to process data from research and present findings in a report for a client

## **Assessment tasks**

- 2. Research Proposal
- 3. Funding Proposal
- 4. Data Analysis & Report

## **PG - Discipline Knowledge and Skills**

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

## **Learning outcomes**

- Show a basic understanding of research paradigms, associated methodology and the purposes of research for sustainable development
- Apply action research methods in the design and planning of a project for sustainable development
- Demonstrate an ability to critically review international literature on action research to write a literature review for your project
- Understand the importance of ethics in research
- Prepare a funding proposal for research using a grantee's format
- Demonstrate skills to process data from research and present findings in a report for a client

## **Assessment tasks**

- 2. Research Proposal
- 3. Funding Proposal

## **PG - Critical, Analytical and Integrative Thinking**

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience,

of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

## **Learning outcomes**

- Show a basic understanding of research paradigms, associated methodology and the purposes of research for sustainable development
- Apply action research methods in the design and planning of a project for sustainable development
- Demonstrate an ability to critically review international literature on action research to write a literature review for your project
- Demonstrate skills to process data from research and present findings in a report for a client

## **Assessment tasks**

- 1. Research methodology
- 2. Research Proposal
- 3. Funding Proposal
- 4. Data Analysis & Report

## **PG - Research and Problem Solving Capability**

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

## **Learning outcomes**

- Show a basic understanding of research paradigms, associated methodology and the purposes of research for sustainable development
- Apply action research methods in the design and planning of a project for sustainable development
- Demonstrate an ability to critically review international literature on action research to write a literature review for your project
- Prepare a funding proposal for research using a grantee's format
- Demonstrate skills to process data from research and present findings in a report for a client

## Assessment tasks

- 1. Research methodology
- 2. Research Proposal
- 3. Funding Proposal

## PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

### Learning outcomes

- Apply action research methods in the design and planning of a project for sustainable development
- Present and defend a research project
- Prepare a funding proposal for research using a grantee's format
- Demonstrate skills to process data from research and present findings in a report for a client

## Assessment tasks

- 1. Research methodology
- 2. Research Proposal
- 3. Funding Proposal
- 4. Data Analysis & Report

## PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

### Learning outcomes

- Apply action research methods in the design and planning of a project for sustainable development
- Understand the importance of ethics in research

- Demonstrate skills to process data from research and present findings in a report for a client

## **Assessment task**

- 3. Funding Proposal